



ENTERED

OIPE

RAW SEQUENCE LISTING

DATE: 06/17/2002 p.6

PATENT APPLICATION: US/09/922,405B

TIME: 13:59:55

Input Set : A:\GZ 2103.00 SEQLST.txt

Output Set: N:\CRF3\06172002\I922405B.raw

4 <110> APPLICANT: Nicolette, Charles A.
 6 <120> TITLE OF INVENTION: THERAPEUTIC ANTI-MELANOMA COMPOUNDS
 9 <130> FILE REFERENCE: GZ 2103.00
 11 <140> CURRENT APPLICATION NUMBER: US 09/922,405B
 C--> 12 <141> CURRENT FILING DATE: 2002-06-10
 14 <150> PRIOR APPLICATION NUMBER: US 60/223,641
 15 <151> PRIOR FILING DATE: 2000-08-04
 17 <150> PRIOR APPLICATION NUMBER: US 60/255,502
 18 <151> PRIOR FILING DATE: 2000-12-13
 20 <150> PRIOR APPLICATION NUMBER: US 60/264,432
 21 <151> PRIOR FILING DATE: 2001-01-25
 23 <150> PRIOR APPLICATION NUMBER: US 60/279,005
 24 <151> PRIOR FILING DATE: 2001-03-26
 27 <160> NUMBER OF SEQ ID NOS: 26
 29 <170> SOFTWARE: FastSEQ for Windows Version 4.0
 31 <210> SEQ ID NO: 1
 32 <211> LENGTH: 1524
 33 <212> TYPE: DNA
 34 <213> ORGANISM: Homo sapien
 36 <400> SEQUENCE: 1
 37 agcagacaga ggactctcat taaggaaggt gtccgtgtgcc ctgaccctac aagatgccaa 60
 38 gagaagatgc tcacttcac tcattgtacc ccaagaagg gcacggccac tcttacacca 120
 39 cggctgaaga ggccgctggg atcggcatcc tgacagtgat cctgggagtc ttactgctca 180
 40 tcggtgttg gtattgtaga agacgaaatg gatacagagc cttgatggat aaaagtcttc 240
 41 atgttggcac tcaatgtgcc ttaacaagaa gatgccaca agaagggttt gatcatcggg 300
 42 acagcaaagt gtctcttcaa gagaaaaact gtgaacctgt ggttcccaat gctccacctg 360
 43 cttatgagaa actctctgca gaacagtcac caccacctta ttcaccttaa gagccagcga 420
 44 gacacctgag acatgctgaa attatttctc tcacactttt gcttgaattt aatacagaca 480
 45 tctaattgtc tccttttgaa tgggtgtagga aaaatgcaag ccatctctaa taataagtca 540
 46 gtgttaaaat tttagtaggt ccgctagcag tactaatcat gtgaggaaat gatgagaaat 600
 47 attaaattgg gaaaactcca tcaataaatg ttgcaatgca tgatactatc tgtgccagag 660
 48 gtaatgttag taaatccatg gtgttatatt ctgagagaca gaattcaagt gggatttctg 720
 49 gggccatcca atttctcttt acttgaaatt tggctaataa caaactagtc aggttttctg 780
 50 accttgaccg acatgaactg tacacagaat tgttccagta ctatggagtg ctcacaaagg 840
 51 atacttttac aggttaagac aaagggttga ctggcctatt tatctgatca agaacatgtc 900
 52 agcaatgtct ctttgtgctc taaaattcta ttatactaca ataatatatt gtaaagatcc 960
 53 tatagctctt tttttttgag atggagtttc gcttttgttg cccaggctgg agtgcaatgg 1020
 54 cgcgatcttg gctcaccata acctccgct cccaggttca agcaattctc ctgccttagc 1080
 55 ctctgagta gctgggatta caggcgtgag ccactatgcc tgactaattt tgtagtttta 1140
 56 gtagagacgg ggtttctcca tgttggtcag gctgggtctc aactcctgac ctcagggtgat 1200
 57 ctgcccgcct cagcctccca aagtgttgga attacaggcg tgagccacca cgcctggctg 1260
 58 gatcctatat cttaggttaag acatataacg cagtctaatt acatttcaact tcaaggctca 1320
 59 atgctattct aactaatgac aagtattttc tactaaacca gaaattggtg gaaggattta 1380

RAW SEQUENCE LISTING

DATE: 06/17/2002

PATENT APPLICATION: US/09/922,405B

TIME: 13:59:55

Input Set : A:\GZ 2103.00 SEQLST.txt

Output Set: N:\CRF3\06172002\I922405B.raw

60 aataagtaaa agctactatg tactgcotta gtgctgatgc ctgtgtactg ccttaaagt 1440
 61 acctatggca atttagctct cttgggttcc caaatccctc tcacaagaat gtgcagaaga 1500
 62 aatcataaag gatcagagat tctg 1524

64 <210> SEQ ID NO: 2

65 <211> LENGTH: 118

66 <212> TYPE: PRT

67 <213> ORGANISM: Homo sapien

69 <400> SEQUENCE: 2

70 Met Pro Arg Glu Asp Ala His Phe Ile Tyr Gly Tyr Pro Lys Lys Gly

71 1 5 10 15

72 His Gly His Ser Tyr Thr Thr Ala Glu Glu Ala Ala Gly Ile Gly Ile

73 20 25 30

74 Leu Thr Val Ile Leu Gly Val Leu Leu Leu Ile Gly Cys Trp Tyr Cys

75 35 40 45

76 Arg Arg Arg Asn Gly Tyr Arg Ala Leu Met Asp Lys Ser Leu His Val

77 50 55 60

78 Gly Thr Gln Cys Ala Leu Thr Arg Arg Cys Pro Gln Glu Gly Phe Asp

79 65 70 75 80

80 His Arg Asp Ser Lys Val Ser Leu Gln Glu Lys Asn Cys Glu Pro Val

81 85 90 95

82 Val Pro Asn Ala Pro Pro Ala Tyr Glu Lys Leu Ser Ala Glu Gln Ser

83 100 105 110

84 Pro Pro Pro Tyr Ser Pro

85 115

88 <210> SEQ ID NO: 3

89 <211> LENGTH: 9

90 <212> TYPE: PRT

91 <213> ORGANISM: Artificial Sequence

93 <220> FEATURE:

94 <223> OTHER INFORMATION: MART-1

96 <400> SEQUENCE: 3

97 Leu Ser Gly Ile Gly Ile Leu Thr Val

98 1 5

101 <210> SEQ ID NO: 4

102 <211> LENGTH: 27

103 <212> TYPE: DNA

104 <213> ORGANISM: Artificial Sequence

106 <220> FEATURE:

107 <223> OTHER INFORMATION: MART-1

W--> 109 <221> NAME/KEY: misc_feature

110 <222> LOCATION: 3, 6, 9, 15, 21, 24, 27

111 <223> OTHER INFORMATION: n = A,T,C or G

W--> 113 <400> 4

W--> 114 ytnwsnggna thggnathyt nacngtn 27

116 <210> SEQ ID NO: 5

117 <211> LENGTH: 9

118 <212> TYPE: PRT

119 <213> ORGANISM: Artificial Sequence

121 <220> FEATURE:

RAW SEQUENCE LISTING

DATE: 06/17/2002

PATENT APPLICATION: US/09/922,405B

TIME: 13:59:55

Input Set : A:\GZ 2103.00 SEQLST.txt

Output Set: N:\CRF3\06172002\I922405B.raw

```

122 <223> OTHER INFORMATION: MART-1
124 <400> SEQUENCE: 5
125 Leu Thr Gly Ile Gly Ile Leu Thr Val
126 1 5
129 <210> SEQ ID NO: 6
130 <211> LENGTH: 27
131 <212> TYPE: DNA
132 <213> ORGANISM: Artificial Sequence
134 <220> FEATURE:
135 <223> OTHER INFORMATION: MART-1
W--> 137 <221> NAME/KEY: misc_feature
138 <222> LOCATION: 3, 6, 9, 15, 21, 24, 27
139 <223> OTHER INFORMATION: n = A,T,C or G
W--> 141 <400> 6
W--> 142 ytnacnggna thggcnathyt nacngtn 27
144 <210> SEQ ID NO: 7
145 <211> LENGTH: 9
146 <212> TYPE: PRT
147 <213> ORGANISM: Artificial Sequence
149 <220> FEATURE:
150 <223> OTHER INFORMATION: MART-1
152 <400> SEQUENCE: 7
153 Val Thr Gly Ile Gly Ile Leu Thr Val
154 1 5
157 <210> SEQ ID NO: 8
158 <211> LENGTH: 27
159 <212> TYPE: DNA
160 <213> ORGANISM: Artificial Sequence
162 <220> FEATURE:
163 <223> OTHER INFORMATION: MART-1
W--> 165 <221> NAME/KEY: misc_feature
166 <222> LOCATION: 3, 6, 9, 15, 21, 24, 27
167 <223> OTHER INFORMATION: n = A,T,C or G
W--> 169 <400> 8
W--> 170 gtnacnggna thggcnathyt nacngtn 27
172 <210> SEQ ID NO: 9
173 <211> LENGTH: 9
174 <212> TYPE: PRT
175 <213> ORGANISM: Artificial Sequence
177 <220> FEATURE:
178 <223> OTHER INFORMATION: MART-1
180 <400> SEQUENCE: 9
181 Phe Ala Gly Ile Gly Ile Leu Thr Val
182 1 5
185 <210> SEQ ID NO: 10
186 <211> LENGTH: 27
187 <212> TYPE: DNA
188 <213> ORGANISM: Artificial Sequence
190 <220> FEATURE:

```

RAW SEQUENCE LISTING

DATE: 06/17/2002

PATENT APPLICATION: US/09/922,405B

TIME: 13:59:55

Input Set : A:\GZ 2103.00 SEQLST.txt

Output Set: N:\CRF3\06172002\I922405B.raw

```

191 <223> OTHER INFORMATION: MART-1
W--> 193 <221> NAME/KEY: misc_feature
194 <222> LOCATION: 6, 9, 15, 21, 24, 27
195 <223> OTHER INFORMATION: n = A,T,C or G
W--> 197 <400> 10
W--> 198 ttgcnnggna thggnathyt nacngtn 27
200 <210> SEQ ID NO: 11
201 <211> LENGTH: 9
202 <212> TYPE: PRT
203 <213> ORGANISM: Artificial Sequence
205 <220> FEATURE:
206 <223> OTHER INFORMATION: MART-1
208 <400> SEQUENCE: 11
209 Thr Ala Gly Ile Gly Ile Leu Thr Val
210 1 5
213 <210> SEQ ID NO: 12
214 <211> LENGTH: 27
215 <212> TYPE: DNA
216 <213> ORGANISM: Artificial Sequence
218 <220> FEATURE:
219 <223> OTHER INFORMATION: MART-1
W--> 221 <221> NAME/KEY: misc_feature
222 <222> LOCATION: 3, 6, 9, 15, 21, 24, 27
223 <223> OTHER INFORMATION: n = A,T,C or G
W--> 225 <400> 12
W--> 226 acngcnnggna thggnathyt nacngtn 27
228 <210> SEQ ID NO: 13
229 <211> LENGTH: 9
230 <212> TYPE: PRT
231 <213> ORGANISM: Homo sapien
233 <400> SEQUENCE: 13
234 Gly Val Gly Ile Gly Ile Leu Thr Val
235 1 5
238 <210> SEQ ID NO: 14
239 <211> LENGTH: 27
240 <212> TYPE: DNA
241 <213> ORGANISM: Artificial Sequence
243 <220> FEATURE:
244 <223> OTHER INFORMATION: MART-1
W--> 246 <221> NAME/KEY: misc_feature
247 <222> LOCATION: 3, 6, 9, 15, 21, 24, 27
248 <223> OTHER INFORMATION: n = A,T,C or G
W--> 250 <400> 14
W--> 251 ggngunggna thggnathyt ncangtn 27
253 <210> SEQ ID NO: 15
254 <211> LENGTH: 9
255 <212> TYPE: PRT
256 <213> ORGANISM: Homo sapien
258 <400> SEQUENCE: 15

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/922,405B

DATE: 06/17/2002

TIME: 13:59:55

Input Set : A:\GZ 2103.00 SEQLST.txt

Output Set: N:\CRF3\06172002\I922405B.raw

```

259 Phe Leu Phe His Thr Glu Tyr Val Val
260 1 5
263 <210> SEQ ID NO: 16
264 <211> LENGTH: 27
265 <212> TYPE: DNA
266 <213> ORGANISM: Artificial Sequence
268 <220> FEATURE:
269 <223> OTHER INFORMATION: MART-1
W--> 271 <221> NAME/KEY: misc_feature
272 <222> LOCATION: 6, 15, 24, 27
273 <223> OTHER INFORMATION: n = A,T,C or G
W--> 275 <400> 16
W--> 276 ttttnttttc ayacngarta ygtngtn 27
278 <210> SEQ ID NO: 17
279 <211> LENGTH: 9
280 <212> TYPE: PRT
281 <213> ORGANISM: Homo sapien
283 <400> SEQUENCE: 17
284 Phe Leu Phe His Thr Ala Tyr Ile Val
285 1 5
288 <210> SEQ ID NO: 18
289 <211> LENGTH: 27
290 <212> TYPE: DNA
291 <213> ORGANISM: Artificial Sequence
293 <220> FEATURE:
294 <223> OTHER INFORMATION: MART-1
W--> 296 <221> NAME/KEY: misc_feature
297 <222> LOCATION: 6, 15, 18, 27
298 <223> OTHER INFORMATION: n = A,T,C or G
W--> 300 <400> 18
W--> 301 ttttnttttc ayacngenta yathgtn 27
303 <210> SEQ ID NO: 19
304 <211> LENGTH: 9
305 <212> TYPE: PRT
306 <213> ORGANISM: Homo sapien
308 <400> SEQUENCE: 19
309 Phe Leu Tyr His Thr Pro Met Val Val
310 1 5
313 <210> SEQ ID NO: 20
314 <211> LENGTH: 27
315 <212> TYPE: DNA
316 <213> ORGANISM: Artificial Sequence
318 <220> FEATURE:
319 <223> OTHER INFORMATION: MART-1
W--> 321 <221> NAME/KEY: misc_feature
322 <222> LOCATION: 6, 15, 18, 24, 27
323 <223> OTHER INFORMATION: n = A,T,C or G
W--> 325 <400> 20
W--> 326 ttttntayc ayacnccnat ggtngtn 27

```

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/922,405B

DATE: 06/17/2002
TIME: 13:59:56

Input Set : A:\GZ 2103.00 SEQLST.txt
Output Set: N:\CRF3\06172002\I922405B.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:4; N Pos. 3,6,9,15,21,24,27
Seq#:6; N Pos. 3,6,9,15,21,24,27
Seq#:8; N Pos. 3,6,9,15,21,24,27
Seq#:10; N Pos. 6,9,15,21,24,27
Seq#:12; N Pos. 3,6,9,15,21,24,27
Seq#:14; N Pos. 3,6,9,15,21,24,27
Seq#:16; N Pos. 6,15,24,27
Seq#:18; N Pos. 6,15,18,27
Seq#:20; N Pos. 6,15,18,24,27
Seq#:22; N Pos. 6,15,18,27
Seq#:24; N Pos. 6,9,12,15,18,21,24,27
Seq#:26; N Pos. 3,6,9,15,21,24,27

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/922,405B

DATE: 06/17/2002

TIME: 13:59:56

Input Set : A:\GZ 2103.00 SEQLST.txt

Output Set: N:\CRF3\06172002\I922405B.raw

L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:109 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:113 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:4
L:114 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0
L:137 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:141 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:6
L:142 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0
L:165 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:169 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:8
L:170 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0
L:193 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:197 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:10
L:198 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0
L:221 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:225 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:12
L:226 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:0
L:246 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:250 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:14
L:251 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:0
L:271 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:275 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:16
L:276 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:0
L:296 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:300 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:18
L:301 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18 after pos.:0
L:321 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:325 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:20
L:326 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:0
L:346 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:350 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:22
L:351 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 after pos.:0
L:371 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:375 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:24
L:376 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24 after pos.:0
L:398 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:0